

Work Order ID 147394

Wednesday, June 08, 2016 3:11:08 PM

Page 1

Item ID: D4974-1

Revision ID:

Item Name: Upper Rail

Start Date: 6/3/2016 Start Qty: 200

Required Date: 6/8/2016 Req'd Qty: 200

Reference:

Accept

N900040100Setup Start ***NS1***Stop ***NS2***

Cust Item ID:

Customer:

Approvals: Process Plan: MLJ Date: JUN 10 2016 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4974	D

105

0.00

105

Bandsaw

Memo

Jeaspa Bandsaw

CUT BLANK 12.875" LONG

0.00

110

0.23

110

HAAS 1

HAAS CNC VERTICAL MACHINING #1

Memo

HAAS CNC vertical machine #1

1-Machine per folio FB230

DWG REV: DFOLIO REV: AA

0.24

2- deburr and break all sharp edges

4

16-06-22

4

0

DAS
14
9-00

16/06/25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 147394

Wednesday, June 08, 2016 3:11:08 PM

147394

Page 2

Item ID: D4974-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Upper Rail

Start Date: 6/3/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

4 0
DAS
14
9-89

06/06/25

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.01

Quality Control

4 0
DAS
45
9-89

2016-6-27

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

140

Outsource4

Memo

0.00

Outsource process - Anodize

Issue P/O to ATG : 32971

1- Black Anodize as per Dwg D4974

2- Prime as per dwg

Certification of Comformity is required

4
JUL 08 2016
DAS
13
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Misidentified ☐	Past Due ☐																																																																

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Page 3

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Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Upper Rail

Start Date: 6/3/2016 Start Qty: 2.00

2

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Required Date: 6/8/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.01							
Packaging									
155	QC5- Inspect part completeness to step on W/O	0.00							
155									
QC	Memo	0.01							
Quality Control									
180	Identify as per dwg & Stock Location. <u>CCF 129</u>	0.00							
180									
Packaging	Memo	0.00							
Packaging									

4X 8016-719.

(4)

DAS
38
9-89
JUL 20 2016

4

DAS
JUL 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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		OTHER : ☐							

Work Order ID 147394***147394***

Page 4

Wednesday, June 08, 2016 3:11:08 PM

Item ID: D4974-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Upper Rail

Start Date: 6/3/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.03

DAS
21
9-89

JUL 22 2016

Quality Control

DAS
21
9-89

JUL 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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		OTHER : ☐																							

Picklist Print

Wednesday, June 08, 2016 3:11:11 PM

Page 1

Work Order ID: 147394

147394

Parent Item: D4974-1

D4974-1

Parent Item Name: Upper Rail

Start Date: 6/3/2016

Required Date: 6/8/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 13-11-14 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6B1.750X02.25 0		Purchased	No				f	52.5251		2.261053	4.52		

M7075T6B1 750X02 250

7075-T6 BAR 1.750" X 2.250"

Location

Loc Qty

Loc Code

MAT006

52.5251

M130312

24

M131552

4.5251

M132458

24

4.3'

16-06-22

DQA: _____ Date: _____

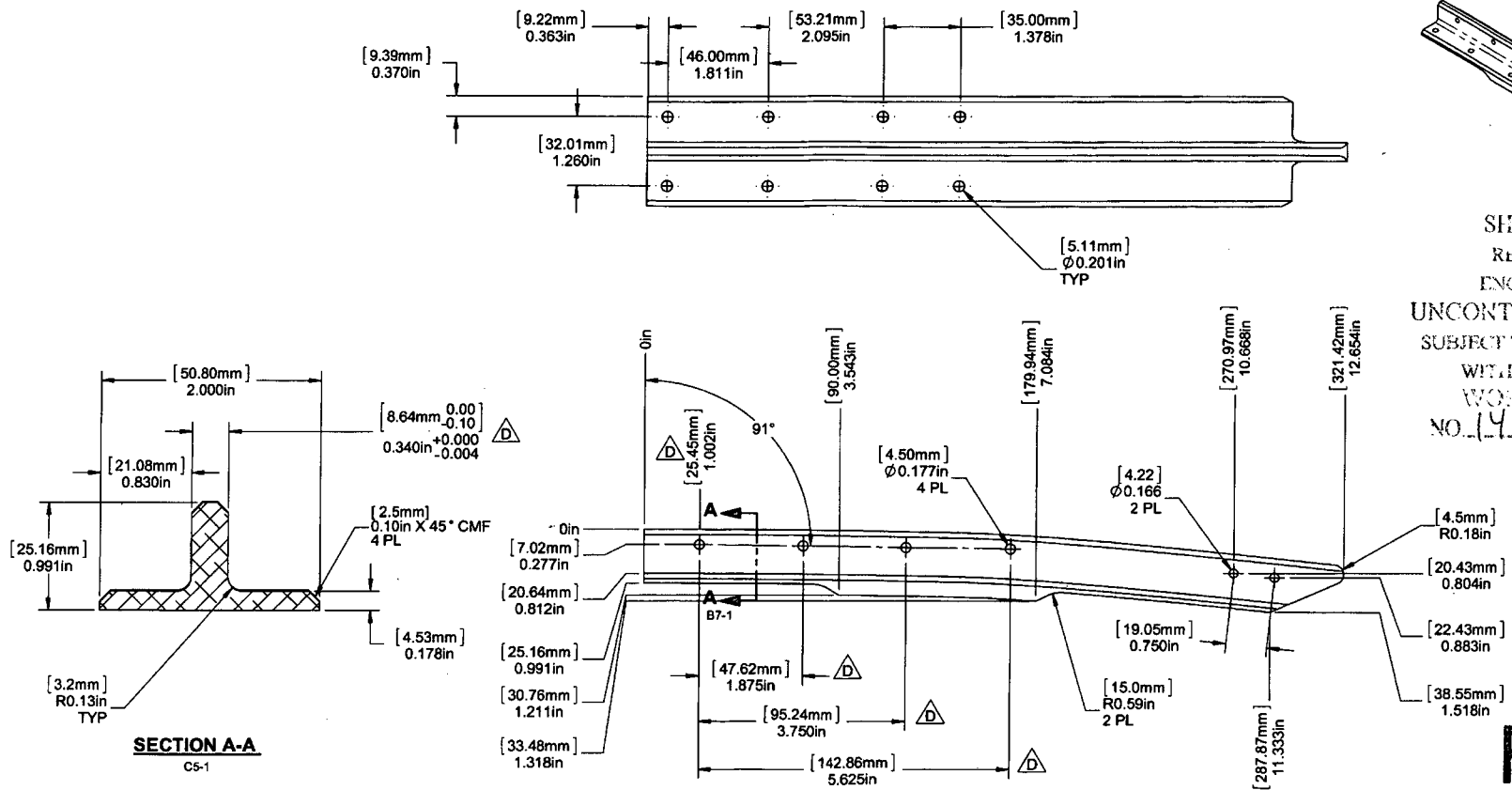


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																																		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																																		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																																		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																																		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																																		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																																		
Past Expiry Date ☐	Manufacturing Process ☐																																																																																						
Misidentified ☐	Past Due ☐																																																																																						
OTHER :																																																																																							



SHOP
RETURN
ENGINE
UNCONTROL
SUBJECT TO
WITHOUT
WORK
NO. 147394 MJS
160010

RELEASED
2014-07-28

D4974-1 UPPER RAIL

- NOTES:**
- 1) MATERIAL: 7075-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122/4123/4186/4187) OR
PER AMS-QQ-A-200/11 (REF DART SPEC M7075T6B)
 - 2) FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK,
PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX, AS PER QSI 005.
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4974-1", REVISION, BATCH NUMBER AND
DATE OF MANUFACTURE, USING AN X-TENSION STAMP, PER QSI 044 METHOD 6.2
 - 7) WEIGHT: 0.89 lbs (0.41 kgs)
 - 8) UNDIMENSIONED FEATURES CONTROLLED BY CAD MODEL FILE: D4974-1-d.IGES

D	REVISED UPPER RAIL HOLE LOCATIONS (ZN B5-1). REVISED DIMENSION TOLERANCE (ZN C6-1)	AK	14.07.18
C	REVISE NOTE 6) (ZN A8-1)	AK	14.06.05
B	ADDED HOLES TO D4974-1 (ZN D4-1)	AK	14.05.07
A	NEW ISSUE	DC	13.11.11
REV.	DESCRIPTION	BY	DATE
DESIGN	DC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. D
MFG. APPR.	JFS	D4974	SHEET 1 OF 1
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	UPPER RAIL	NTS
DATE	14.07.18	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO32971

Purchase Order Date 7/8/2016

PO Print Date 7/13/2016

Page Number 2 of 5

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Total: \$27.00

4 147632

D4703-043 LOCK PIN
REV. A

7/18/2016

10.00

\$2.70

\$27.00

Yes

7/18/2016

BLACK ANODIZE AS PER MIL-A-8625F TYPE MIL-A-8625F TYPE III, CLASS 2

Line Total: \$27.00

5 147739

647.3916 DEFLECTOR
REV. C

7/18/2016

6.00

\$18.10

\$108.60

Yes

7/18/2016

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

Line Total: \$108.60

6 147394

D4974-1 UPPER RAIL
REV. D

7/18/2016

4.00

\$10.80

\$43.20

Yes

7/18/2016

FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE I CLASS N

8016-7-19.

Note:

7/13/2016



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 911973

Date: 18-Jul-16

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

CHANTAL LAVOIE
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		BEST WAY	
Quantity	Description		
4 ea	Part: D4974-1 UPPER RAIL Job: 19788	Rev: D PO: PO32971 Line: 6	<i>SP/6-7-19</i>
10 ea	Part: 647.7813 CENTER PLATE Job: 19789	Rev: A PO: PO32971 Line: 7	
16 ea	Part: 646.3717 DOUBLER Job: 19790	Rev: A PO: PO32971 Line: 8	
2 ea	Part: D4973-1 UPPER CUTTER Job: 19791	Rev: C PO: PO32971 Line: 9	
DATE: <u>18/7/16</u>			
CERTIFIED SIGNATURE: <u><i>[Signature]</i></u>			
RECEIVER SIGNATURE: _____			
Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt. CERTIFICATE OF CONFORMANCE A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT CONFORM TO REQUIREMENTS. MADE IN CANADA.			